RICIN TOXIN

Ricin is a potent protein toxin derived from the beans of the castor plant (*Ricinus communis*). Castor beans grow worldwide, and the toxin is fairly easily produced.

Infection

Because ricin is toxic by numerous exposure routes, its use by terrorists might involve poisoning of water or foodstuffs, inoculation via ricin-laced projectiles, aerosolization of liquid ricin or distribution of a powder.

Symptoms

Weakness, fever, cough and pulmonary edema occur 18 to 24 hours after inhalation exposure, followed by severe respiratory distress and death from hypoxemia in 36 to 72 hours.

Treatment

Management is supportive and should include treatment for pulmonary edema. Gastric decontamination measures should be used if ingested.

Vaccination/Prophylaxis

Currently, no vaccine or prophylactic antitoxin is available for human use, although immunization appears promising in animal models. Use of a protective mask currently is the best protection against inhalation.

Decontamination

Health-care workers should take standard precautions. Secondary aerosols generally should not be a danger to health-care providers. Weak hypochlorite solutions (0.1% sodium hypochlorite) and/or soap and water can decontaminate skin surfaces.

For more information, call the North Dakota Department of Health at 701.328.2378.